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EXAMINER

PATEL, ASHOKKUMAR B

ART UNIT PAPER NUMBER

2154

DATE MAILED: 08/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/072,564

Applicant(s)

CHEN ET AL.

Examiner

Ashok B. Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-20 are subject to examination.

Response to Arguments

2. Applicant's arguments filed 06/20/2005 have been fully considered but they are not persuasive for the following reasons:

Rejections under 35 U.S.C. § 102:

Applicant's argument:

"Thus, Mei's approach not only fails to determine their service levels based upon gathered data, but Mei's approach is necessarily static, in that Mei cannot update the service levels based upon newly collected data. Accordingly, not only does Mei's approach fail to teach the foregoing recited claim limitations, Mei actually teaches away. Because Mei's approach uses content provider supplied service level tables, Mei must rely upon the content providers to supply new tables in order for service levels to change. Thus, Mei's approach cannot be used to dynamically determine service levels based upon relationships in the data because Mei cannot update the service levels without the content providers. In other words, Mei's use of static information in service level tables teaches away from applicant's recited invention as to its process."

Examiner's response:

Mei teaches in col. 5, line 46-54, "It should be appreciated that there can be different policies for implementing differentiated services depending on the business model of a content provider. A content provider can differentiate its services based on the user ID. For example, in table 301 user John Doe belongs to the gold service level,

Mary Smith belongs to the silver service level and Kevin Peters belongs to the bronze service level. The requests made by these users will be serviced differently.”

Thus Mei uses User ID based service level tables. And as such Mei teaches “a data store to store customer data comprising data exchanged with a customer;”.

Mei further goes on teaching in col. 5, line 57-65, “It should also be realized that the priority assignment can be either static or dynamically changing. For example, the priorities could be changed according to how a user accesses the Internet. The service level can be dynamically increased when a user is in the transaction mode and decreased when he/she is in the browsing mode. The user identification can be a request destination, it can be based on a secure protocol such as https, and it may as well be based on HTTP method types, such as get or post.”

Thus Mei clearly teaches in conjunction with the User ID, “dynamically determines traffic routing rules at the content switch (CS) for routing network traffic based at least in part upon the at least one relationship in the customer data dynamically determined by the analysis means.”

Rejections under 35 U.S.C. § 103:

Applicant’s argument: Claims 6 and 7:

“While Bruck states that their load balancer is able to perform “dynamic load balancing” (Bruck, Abstract, lines 7 -8), Bruck’s system necessarily relies on statically defined routing table settings (Bruck, col. 18, lines 35-39), not dynamically derived relationships, to perform direction of traffic. Accordingly, any argued addition of such a

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mechanism for dynamically derived relationships to Bruck would change Bruck's principle of operation (see MPEP j 2143.01)."

"Accordingly, Bruck teaches away from the embodiments recited by claim 1 as to its purpose as well as its process."

Examiner's response:

As stated above, Mei teaches "dynamically determines traffic routing rules at the content switch (CS) for routing network traffic based at least in part upon the at least one relationship in the customer data dynamically determined by the analysis means." of claim 1.

As stated in the previous Office Action, Bruck teaches a graphic user interface from which customers configure parameters for the content traffic governor including routing table settings (at least Fig. 27, col. 37, lines 17-40; and Figs. 10, 11, col. 18, line 43-col. 19, line 25).

Therefore, it would have been obvious to one of ordinary skill in this art at the time the invention was made to combine the teaching of Mei and Bruck because they both deal with managing resources assigned to service client requests. Furthermore, the teaching of Bruck to provide a graphical user interface for configuring the routing table settings taught by Mei which will provide increase the efficiency of managing of the system by users by providing user screens which guide the user through the setup (See Bruck, col. 18, lines 35-39).

Thus, Bruck can and will, to one of ordinary skills in the art, enhance the system of Mei rather than its teaching drawing away from the embodiments recited by claim 1 (the system of Mei) to its purpose as well as its process.

Applicant's argument: Claims 10 and 16:

"Even if the Office Action's argument that Masters's method for inserting and examining cookies could be combined with Mei's approach were even plausible, the asserted combination would still fail to teach, suggest or otherwise render obvious at least the recited "dynamically determining a service level based at least in part upon at least one relationship determined from data exchanged with the sender" of claims 8 and 14."

"Accordingly, not only does Masters teach away from its purpose as well as its result, any argued addition of such business logic analysis to Masters would change Masters's principle of operation (see MPEP § 2143.01)."

Examiner's response:

Please refer to the above about Mei's teachings of claim 8.

Masters teaches fetching a routing cookie from the user request (Paragraph 0077). 36. It would have been obvious to one of ordinary skill in this art at the time the invention was made to combine the teaching of Mei and Masters because they both selecting a path to resources to service a user request. Furthermore, the teaching of Masters to fetch a routing cookie from a user request provides increased efficiency in selecting the correct path by avoiding the need to lookup the server on subsequent

requests and avoiding the need to copy state information to a new server (See Masters 0079 and 0050). And this is of a paramount importance.

Applicant's argument: Claims 11-13 and 17:

"Accordingly, since claims 11, 12, 13 and 17 depend from these (claims 8 and 14) claims, the 'Official Notice' items, even if arguendo true, still would not teach, suggest or otherwise render obvious the embodiments recited by these claims."

Examiner's response:

"Official Notice" is taken by the examiner that deleting the unnecessary user ID cookie would have been well known and expected in the art. However, please refer to the above responses for Mei's and Master's teachings for remaining claim elements.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351 (a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-5, 8, 9, 14, 15, and 18-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Mei et al. (US Patent 6,816,907, hereinafter Mei).

5. As per claim 1, Mei discloses a system for routing network traffic (col. 3, lines 3034), comprising: a content traffic governor (CTG) (Fig. 2, item 201 A); a content switch Fig. 2, item 201); a data source to store customer data comprising data exchanged with a customer (Fig. 2, items 301 and 302); an analysis means that

analyzes customer data supplied from the data source to determine at least one relationship in the customer data (col. 5, lines 49-55); and wherein the content traffic governor (CTG), in conjunction with the analysis means, dynamically determines traffic routing rules at the content switch (CS) for routing of network traffic based at least in part upon the at least one relationship in the customer data dynamically determined by the analysis means (col. 5, line 66-col. 6, line 3).

6. As per claim 2, Mei discloses the system of claim 1, further comprising: a default web server; wherein the content switch routes network traffic lacking a routing cookie to the default web server (col. 6, lines 3-6).

7. As per claim 3, Mei discloses the system of claim 1, further comprising: a first web server for providing premium level service (Fig. 4, "gold level servers"); and a second web server for providing standard level service (Fig. 4, "silver level servers"); wherein the content switch routes network traffic to one of the first web server and the second web server based upon a determination of a service level appropriate for a sender of the network traffic, the determination being based on the at least one relationship in the customer data (Fig. 3, service levels designated by customer data; col. 6, lines 8-25).

8. As per claim 4, Mei discloses the system of claim 1, wherein: the content traffic governor routes network traffic based upon the at least one relationship in determined from analyses of at least one of information about a sender of network traffic, a business, a business' customers or any combination thereof (analysis based on information about user who generates request traffic; col. 5, lines 58-65).

9. As per claim 5, Mei discloses the system of claim 4, wherein the information about a sender may be determined from at least one of contents of a packet, an HTTP header, a cookie, a URL (col. 5, lines 54-55, lines 62-65, col. 8, lines 35-36).

10. As per claim 8, Mei discloses a method for routing network traffic, comprising: determining an identity of a sender of a request (col. 5, lines 49-50; col. 8, lines 35-37); dynamically determining a service level based at least in part upon at least one relationship determined from data exchanged with the sender (col. 8, lines 37-40); forwarding the request to resources appropriate for servicing requests of the service level (col. 8, lines 1-26); and setting a cookie in a machine sending the request to cause additional requests from that machine to be directed to the appropriate resources (col. 8, lines 35-36).

11. As per claim 9, Mei discloses the method of claim 8, further comprising: modifying configuration to change routing for a group of senders of requests (col. 7, lines 44-52: routing for group of senders in a given service class modified to add new resources).

12. As per claims 14 and 15, claims 14 and 15 recite a computer product for carrying out the same method as recited in claims 8 and 9 respectively. Claims 14 and 15 are rejected for the same reasons given for claims 8 and 9 above.

13. As per claims 18 and 19, claims 18 and 19 recite an apparatus for carrying out the same method as recited in claims 8 and 9 respectively. Claims 18 and 19 are rejected for the same reasons given for claims 8 and 9 above.

14. As per claim 20, claim 20 recites a computer apparatus for carrying out the method recited in claim 8. Mei describes performing the method on a computer (col. 4, lines 32-41). Claim 20 is rejected for the same reasons given for claim 8 above.

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

17. Claims 6, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mei et al. (US Patent 6,816,907, hereinafter Mei) in view of Bruck et al. (6,801,949, hereinafter Bruck).

18. As per claims 6 and 7, Mei discloses the system substantially as claimed in claim 1, but Mei does not explicitly teach further comprising a user API from which

customers configure parameters for the content traffic governor, the user API used to configure at least one of web server names, matching cookie names and values; routing cookie parameters, including name, value, expiration, path, and security type; user ID cookie names and values; database table names, and parameters to retrieve client profile data; parameter names and threshold values of client profile database table for generation of routing cookie; and routing table setting.

Bruck teaches a graphic user interface from which customers configure parameters for the content traffic governor including routing table settings (at least Fig. 27, col. 37, lines 17-40; and Figs. 10, 11, col. 18, line 43-col. 19, line 25).

It would have been obvious to one of ordinary skill in this art at the time the invention was made to combine the teaching of Mei and Bruck because they both deal with managing resources assigned to service client requests. Furthermore, the teaching of Bruck to provide a graphical user interface for configuring the routing table settings taught by Mei will provide increase the efficiency of managing of the system by users by providing user screens which guide the user through the setup (See Bruck, col. 18, lines 35-39).

19. Claims 10 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mei et al. (US Patent 6,816,907, hereinafter Mei) in view of Masters (US Published Application 2002/0040400).

20. As per claim 10, Mei teaches a method for routing network traffic, comprising: retrieving a user ID cookie from the request; retrieving a user ID from the user ID cookie (col. 5, lines 44-55: receiving request including a user ID; col. 8, lines 35-36, user ID is

based on a cookie); 34. Mei fails to explicitly teach fetching a routing cookie from the request.

Masters teaches fetching a routing cookie from the user request when the request contains the routing cookie. (Paragraph 0077).

It would have been obvious to one of ordinary skill in this art at the time the invention was made to combine the teaching of Mei and Masters because they both selecting a path to resources to service a user request. Furthermore, the teaching of Masters to fetch a routing cookie from a user request provides increased efficiency in selecting the correct path by avoiding the need to lookup the server on subsequent requests and avoiding the need to copy state information to a new server (See Masters 0079 and 0050).

21. As per claim 16, claim recites a computer product for carrying out the same method as described in claim 10. Claim 16 is rejected for the same reasons cited for claims 10 above.

22. Claims 11, 12, 13 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mei and Masters as applied to claim 10 above, and further in view of 'Official Notice'.

23. As per claim 11, Mei does not explicitly teach fetching a routing cookie from another source if the request does not contain the routing cookie; redirecting the request to a web server; deleting the user ID cookie; and setting the routing cookie on a client computer source of the request.

Masters teaches fetching a routing cookie from another source when the request does not contain the routing cookie; redirecting the request to a web server; and setting the routing cookie on a client computer source of the request (Paragraph 0076 when cookie does not initially contain routing information, cookie is generated by server array and cookie is set on client computer).

It would have been obvious to one of ordinary skill in this art at the time the invention was made to combine the teaching of Mei and Masters because they both selecting a path to resources to service a user request. Furthermore, the teaching of Masters to generate a routing cookie when a cookie is not included in the user request provides increased efficiency in selecting the correct path by avoiding the need to lookup the server on subsequent requests and avoiding the need to copy state information to a new server (See Masters 0079 and 0050).

While Mei and Masters do not explicitly teach deleting the user ID cookie, Master's teaches that subsequent requests from the client will be routed using the routing cookie as opposed to the user ID cookie because doing so will be more efficient because a lookup is avoided (Paragraph 0079). However 'Official Notice' is taken by the examiner that deleting the unnecessary user ID cookie would have been well known and expected in the art. It would have been obvious to one of ordinary skill in this art at the time the invention was made to delete the user ID cookie after the routing cookie was determined because doing so would conserve memory and storage space on the client.

24. As per claim 12, Mei does not explicitly teach retrieving the routing cookie ID from the routing cookie of the request; comparing the routing cookie ID from the routing cookie of the request with the routing cookie ID from the user ID; deleting the user ID cookie at a client computer source of the request if the routing cookie ID from the routing cookie of the request and the routing cookie ID from the user ID are the same, and redirecting the request to a web server based upon the routing cookie ID.

Masters teaches retrieving an initial routing cookie ID from the request (Paragraph 0017: routing destination determined from cookie containing user ID), retrieving a routing ID from a routing cookie of a request (paragraph 0079).

Mei teaches that the resource assignments and thus the optimal routing can change dynamically and that new resources can be assigned during high usage periods and that resources in one service level can be used to service requests in another service level if usage in one level is high (col. 7, lines 41-52).

It would have been obvious to one of ordinary skill in the art to combine the teachings of Mei and Masters to periodically establish the optimal route by resubmitting the user ID cookie and comparing the routing information to the previously determined route and to delete the user ID if the optimal route was unchanged and to direct the request to the route in the original routing cookie because doing so would optimize the use of the available resources therefore providing the best currently possible response to user requests (See Mei, col. 7, lines 45-52).

25. As per claim 13, Mei and Masters teach the method of claim 12 (as described above), but Mei does not explicitly teach deleting the routing cookie and creating a new

routing cookie for the client computer if the routing cookie ID from the routing cookie of the request and the routing cookie ID from the user ID are different. 47. Masters teaches retrieving an initial routing cookie ID from the request (Paragraph 0017: routing destination determined from cookie containing user ID), retrieving a routing ID from a routing cookie of a request (paragraph 0079).

Mei teaches that the resource assignments and thus the optimal routing can change dynamically and that new resources can be assigned during high usage periods and that resources in one service level can be used to service requests in another service level if usage in one level is high (col. 7, lines 41-52).

It would have been obvious to one of ordinary skill in the art to combine the teachings of Mei and Masters to periodically establish the optimal route by resubmitting the user ID cookie and comparing the routing information to the previously determined route and to delete old routing cookie, replacing it with a new one if the optimal route changed and to direct the request to the route in the new routing because doing so would optimize the use of the available resources therefore providing the best currently possible response to user requests (See Mei, col. 7, lines 45-52).

26. As per claim 17, claim recites a computer product for carrying out the same method as described in claim 11. Claim 17 is rejected for the same reasons cited for claims 11 above.

Conclusion

Examiner's note: Examiner has cited particular columns and line numbers in the

references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ashok B. Patel whose telephone number is (571) 272-3972. The examiner can normally be reached on 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A. Follansbee can be reached on (571) 272-3964. The fax phone

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number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Abp


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